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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,266

09/13/2005

Hans Stoop

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EXAMINER

WERNER, JONATHAN S

ART UNIT

PAPER NUMBER

3732

MAIL DATE

DELIVERY MODE

07/08/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/549,266	<b>Applicant(s)</b> STOOP, HANS	
	<b>Examiner</b> JONATHAN WERNER	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9,11,12,14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9,11,12,14 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/30/08 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9, 11-12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guedj (US 5,871,356) in view of Eichhorn et al. (US 2002/0046885) and further in view of Bradley (US 3,564,945).
3. Guedj discloses a drill that is capable of being used either as a pilot drill or a step drill in a drilling procedure to create a hole for receiving a dental implant, in which Figures 8 and 9 show the drill comprises a chamfered pilot tip at the apical end with cutting edges, a step which transitions from the guide region (portion to the left of the

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step) to the neck (portion to the right of the step), wherein said neck region is shown to have a larger diameter than the guide portion, and wherein Figure 8 demonstrates the step and guide each has a cutting edge. Figures 8 and 9 also clearly show a drill stem (24) above the neck which is adjoined by a coupling (rightmost projection next to said stem), and at least one spiral groove with adjacent bevels. Guedj additionally discloses the drill has various tip/neck diameters and lengths (i.e. column 2, lines 19-23).

4. Furthermore, Guedj shows in Figures 8 and 9 that the drill has two cutting edges and has two sharply formed tip cutting edges (evidenced by the showing of said edges forming a sharp point), two chamfers, two spirals that extend continuously from the coronal end of the neck to the tip, two step cutting edges, two sharply formed bevels (i.e. the part of the tool which forms the sharp cutting edges), and a number of visible depth markings characterized in the differing shape of each segment of the drill. Guedj also discloses that the drill can have a guide diameter in the region of 1.5 mm and a neck diameter in the region of 2.0 mm (column 6, lines 35-47) wherein the specific size is dependent on the external diameter of the dental implant eventually to be used. However, Guedj does not explicitly disclose a guide length from 1.0 to 4.0 mm or that the tip angle is in the region of 80°. Still, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to make the guide have a length of between 1.0 to 4.0 mm or the tip angle approximately 80° since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re*

*Aller, 105 USPQ 233.* In this case, Examiner notes that the appropriate size required for the drill is dependent on the size of the implant to later be installed. Examiner notes that in regard to claim 14, Guedj does show in Figure 8 that the drill has three cutting edges, three tip cutting edges, three chamfers, three guide cutting edges, three spirals, three bevels, and wherein the tip angle is more than 90° as shown in Figure 9.

5. Though it appears that the guide cutting edges of Guedj have a blunt form (as shown by the substantially flat/blunt portion separating adjacent bevels), Guedj does not explicitly state that said guide cutting edges are indeed blunt. Eichhorn, however, teaches a drill which has guide cutting edges that have a blunt form (see Figure 2 and paragraph 0003). Therefore, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to modify the guide cutting edges of Guedj have a blunt form as taught by Eichhorn in order to assist in guiding the tool head axially while decreasing vibrations.

6. Though Guedj and Eichhorn show the specifics of the particular drill being claimed as described in detail above, Guedj and Eichhorn fail to explicitly disclose the use of a drill set comprising a collection of different sized drills. Bradley, however, discloses a set of similar step drills provided together, wherein each successive drill in the set has increased dimensions (column 3, lines 53-61). Therefore, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to provide a set of drills each having differing dimensions in order to have a desired cutting

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head for a wide range of sizes as taught by Applicant, whereby the different sizes can account for various size implants. With regard to claims 12 and 15, Examiner notes Applicant has claimed statements of intended use, i.e. the drill works to produce an adequate implant site for a dental implant. Such statements of intended use and other functional statements do not impose any further structural limitations on the device claims distinguishable over the prior art of record, which is capable of being used as desired to create a hole for a dental implant (see Figure 10), and accordingly, are given little patentable weight. Examiner further notes that Applicant is claiming an article of manufacture, however, in certain steps, Applicant claims the process of forming/making the device, i.e. how the step and guide cutting edges are sharply or bluntly formed, respectively. Accordingly, the manner in which the device is formed, i.e. sharply or bluntly, is treated as a product-by-process limitation and hence given little patentable weight since the cutting edges shown by Guedj in Figures 8 and 9 are similarly used for cutting purposes.

### ***Response to Arguments***

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN WERNER whose telephone number is (571)272-2767. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melba Bumgarner/  
Primary Examiner, Art Unit 3732

/Jonathan Werner/  
Examiner, Art Unit 3732

6/29/08